

ABSTRACT OF THE DISCLOSURE

According to the present invention, there is provided a variable resistance circuit comprising,

5        a resistor unit having a plurality of resistors series-connected between an input terminal and a predetermined potential terminal, and a switch group including a plurality of switches each having one end connected to a node between the input terminal and the  
10 resistor, a node between the resistors, or a node between the resistor and the predetermined potential terminal, and the other end connected to an output terminal; and

15        a switch control circuit which supplies a control signal to the switch group,

      wherein an attenuation step is generated by supplying the control signal to a pair of adjacent switches included in the switch group so as to complementarily, periodically turning on/off the pair of  
20 switches at a duty of  $a/b$  ( $a$  and  $b$  are positive integers which satisfy  $a < b$ ) for one switch and a duty of  $(b-a)/b$  for the other switch.